

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
28 July 2005 (28.07.2005)

PCT

(10) International Publication Number  
**WO 2005/069012 A2**

(51) International Patent Classification<sup>7</sup>: **G01N 33/68**

(21) International Application Number:  
PCT/US2004/041329

(22) International Filing Date:  
10 December 2004 (10.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/529,384 12 December 2003 (12.12.2003) US

(71) Applicant (for all designated States except US):  
**TRANSTECH PHARMA, INC.** [US/US]; 4170 Mendenhall Oaks Parkway, Suite 110, High Point, NC 27265 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MJALLI, Adnan, M., M.** [US/US]; 2902 Ellington Court, Jamestown, NC 27282 (US). **ARIMILLI, Murty** [US/US]; 701 Number Ten Way, Oak Ridge, NC 27310 (US). **MOHAN, Rao** [CA/US]; 3860-1A Smokey Quartz Court, Greensboro,

NC 27409 (US). **ROTHLEIN, Robert** [US/US]; 6988 Saratoga Court, Summerfield, NC 27358 (US). **ANDREWS, Robert, C.** [US/US]; 3312 Morris Farm Road, Jamestown, NC 27282 (US).

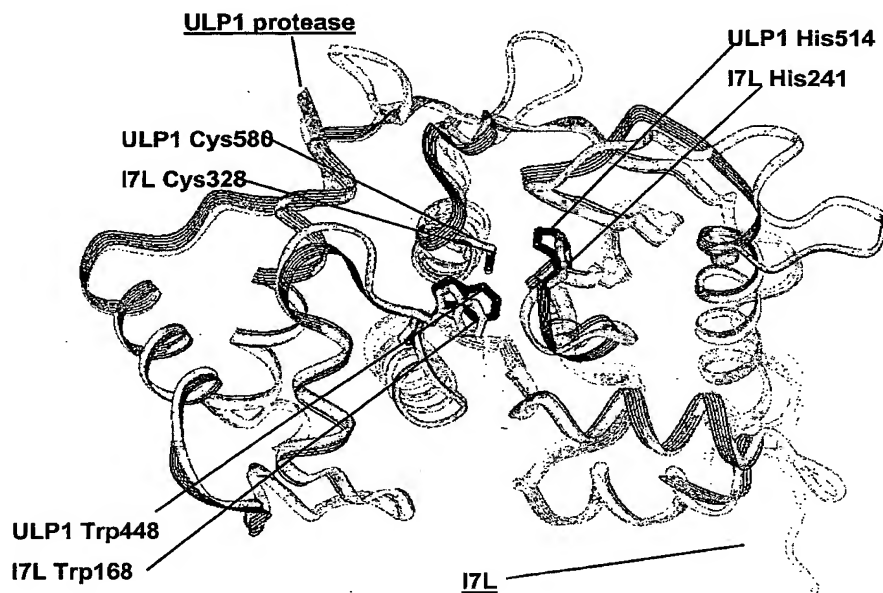
(74) Agent: **CALKINS, Charles, W.**; Kilpatrick Stockton, LLP, 1001 West Fourth Street, Winston-Salem, NC 27101 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: LIGANDS FOR I7L AS MODULATORS OF ORTHOPOX VIRUSES AND METHODS FOR DISCOVERY THEREOF



(57) Abstract: Disclosed are structural coordinates that define the three-dimensional (3D) structure of I7L proteinase and methods by which the coordinates may be used to develop compounds that bind to, and/or modulate, I7L. The technology described herein may be applied to the development of antiviral compounds that target I7L, or may be used to develop target compound that may bind to, and/or modify the catalytic activity of, other proteins.

**BEST AVAILABLE COPY**

WO 2005/069012 A2



FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

- *without international search report and to be republished upon receipt of that report*